TECHNICAL NOTES

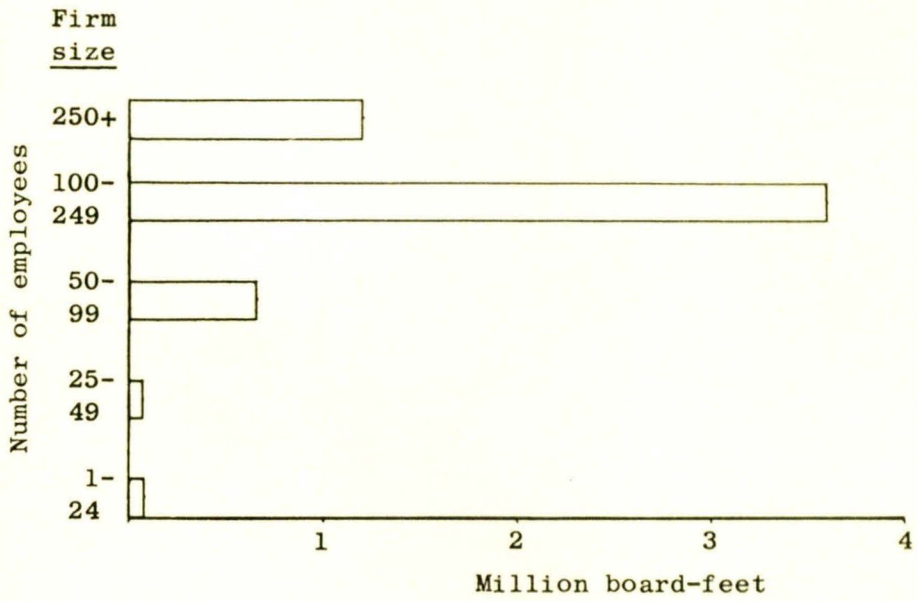
LAKE STATES FOREST EXPERIMENT STATION
U.S. DEPARTMENT OF AGRICULTURE · · FOREST SERVICE

No. 500

The Twin Cities Fabricated Metal Products Industries as Users of Wood

The standard industrial classification[1/], Fabricated Metal Products Industries, includes approximately 275 firms of varying sizes within the city limits of Minneapolis and St. Paul. In 1956 about half of these purchased a substantial volume of lumber for a variety of uses in their manufacturing, storage, and shipping activities. Some of the pertinent facts relating to this wood use are summarized below.

How much wood is used by the Fabricated Metal Products Industries group?--Member firms of this group purchased an estimated 5,609,000 board-feet[2/] of lumber, dimension, and blocking during 1956. Firms with over 250 employees averaged a lower rate of use than did those with between 100-249 employees.



Firm size	Firms in sample	Known firms
250+	13	14
100-249	3	20
50-99	3	26
25-49	5	38
1-24	20	177

1/ This classification divides all industry into 20 major groups. The industry group considered here is made up of firms manufacturing tin cans and other tinwares, cutlery, handtools and general hardware, heating and plumbing supplies (except electrical), fabricated structural metal products, metal stamping and coating, and lighting fixtures, and a miscellaneous group of firms manufacturing such items as wire, springs, razor blades, and chains. The source of the listing used in this study was the 1955 Minnesota Directory of Manufacturers, as tabulated and published by the Minnesota Department of Business Development. The data were developed from sample industry contacts made by the Division of Forestry of the Minnesota Conservation Department.

2/ The standard error is ± 9 percent--that is, the chances are 2 out of 3 that the estimate does not vary from the true figure by more than 511,000 board-feet.

JULY 1957

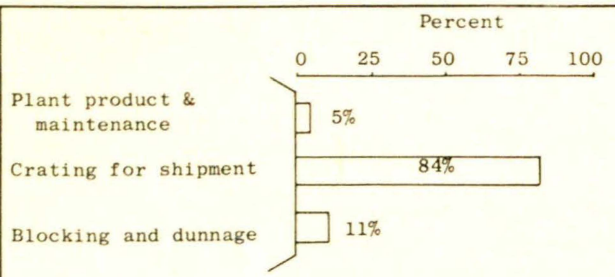
JOHN R. WARNER, Research Forester

(Over)

MAINTAINED AT ST. PAUL 1, MINNESOTA, IN COOPERATION WITH THE UNIVERSITY OF MINNESOTA

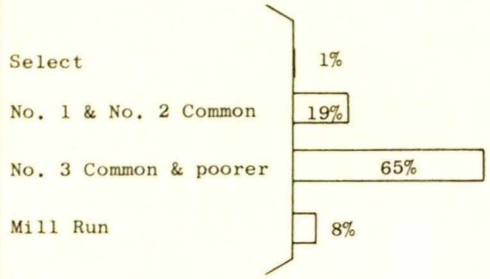
What is the wood used for?

Proper packaging and bracing of products to prevent damage in shipment was the major use of wood. Less than 3 percent became a component part of the firm's product; about 2 percent was used in plant maintenance and for a variety of minor purposes.



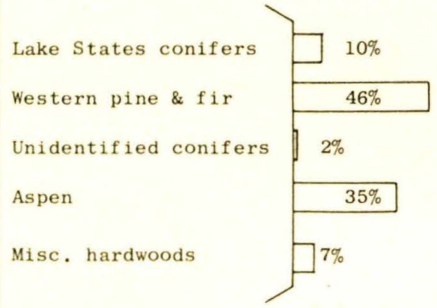
What quality of wood is used?

The wood quality illustrated represents softwood and aspen lumber grades. Product manufacture uses the Select material. No. 1 Common lumber (about 1 percent) was used for patterns; No. 2 Common and poorer including Mill Run went primarily for crating, blocking, and dunnage in product shipment. Miscellaneous hardwoods made up the remaining 7 percent. Of this, 2 percent was Select, 1 percent No. 3 Common, and 4 percent Mill Run.



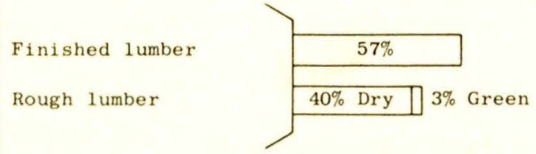
What species are used?

The softer woods including conifers and aspen were favored for their combination of nailing quality and strength. Together they made up 93 percent of the wood used. The hardwoods were select material used primarily in production of the plants' products.



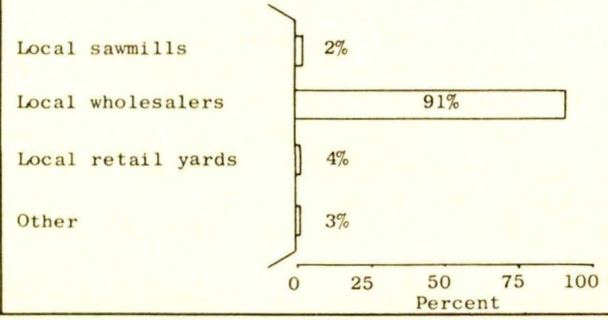
In what form is it purchased?

Most of the finished lumber was shipped from the West Coast and a large proportion of it was used in crating. Green rough lumber was used for blocking and dunnage and was not in demand for crating.



Where is it obtained?

About 15 percent of the firms made purchases in excess of 50,000 board-feet during 1956, accounting for more than 85 percent of all lumber purchased. This volume buying by a relatively small number of firms helps explain distributor importance pictured on the right.



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